

CLAIMS

1. A moving member for a surface acoustic wave actuator, which is pushed against a stator having a surface acoustic wave exciting means and to which a drive force is imparted through a frictional force by a surface acoustic wave propagated on the stationary member, wherein projection-arranged portions and gap portions are formed in parallel with the surface acoustic wave propagating direction on a contact surface of the moving member for contact with the stationary member in such a manner that the ratio of the width of each of the projection-arranged portions to that of each of the gap portions is in the range of between 1:4 and 1:10.

2. A moving member for a surface acoustic wave actuator according to claim 1, wherein all the gap portions are equal in width.

3. A moving member for a surface acoustic wave actuator according to claim 1, wherein two or more projections are formed in each of the projection-arranged portions.

4. A moving member for a surface acoustic wave actuator according to claim 3, wherein the projections formed in each of the projection-arranged portions are arranged at an equal interval.

5. A moving member for a surface acoustic wave actuator according to claim 1, wherein all of the projections formed in the projection-arranged portions are the same in shape.

6. A moving member for a surface acoustic wave actuator according to claim 1, wherein each of the projections has a contact area of not larger than $400 \mu\text{m}^2$.

7. A moving member for a surface acoustic wave actuator according to claim 1, wherein a contact ratio in the whole of the moving member is in the range of between 0.01 and 0.25.

8. A surface acoustic wave actuator using a moving member which is pushed against a stationary member having a surface acoustic wave exciting means and to which a drive force is imparted through a frictional force by a surface acoustic wave propagated on the stationary member, the moving member having projection-arranged portions and gap portions, the projection-arranged portions and the gap portions being formed in parallel with the surface acoustic wave propagating direction on a contact surface of the moving member for contact with the stationary member in such a manner that the ratio of the width of each of the projection-arranged portions to that of each of the gap portions is in the range of between 1:4 and 1:10.

9. A magnetic disk unit using a surface acoustic wave actuator as a head driving actuator, the surface acoustic wave actuator using a moving member which is pushed against a stationary member having a surface acoustic wave exciting means and to which a drive force is imparted through a frictional force by a surface acoustic wave propagated on the stationary member, the moving member having projection-arranged portions and gap portions, the projection-arranged portions and the gap portions being formed in parallel with the surface acoustic wave propagating direction on a contact surface of the moving member for contact with the stationary member in such a manner that the ratio of the width of each of the projection-arranged portions to that of each of the gap portions is in the range

of between 1:4 and 1:10.

10. An optical disk unit using a surface acoustic wave actuator as a head driving actuator, the surface acoustic wave actuator using a moving member which is pushed against a stationary member having a surface acoustic wave exciting means and to which a drive force is imparted through a frictional force by a surface acoustic wave propagated on the stationary member, the moving member having projection-arranged portions and gap portions, the projection-arranged portions and the gap portions being formed in parallel with the surface acoustic wave propagating direction on a contact surface of the moving member for contact with the stationary member in such a manner that the ratio of the width of each of the projection-arranged portions to that of each of the gap portions is in the range of between 1:4 and 1:10.